



UNITED STATES PATENT AND TRADEMARK OFFICE

50  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,412	10/27/2000	Haskell E. Mullins	56108USA1A.002	5638

7590

11/14/2002

Karl G. Hanson  
Office of Intellectual Property Counsel  
3M Innovative Properties Company  
P.O. Box 33427  
St. Paul, MN 55133-3427

EXAMINER

WEISS JR, JOSEPH FRANCIS

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/698,412**

Applicant(s)  
**Mullins et al.**

Examiner  
**Joseph Weiss**

Art Unit  
**3761**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 27, 2000
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2-4 6) ☐ Other:

Art Unit: 3761

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21-22, 24-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over France in view of Tilley (US 6435009) and Dougherty (US 4914957).

In regards to claim 21 France substantially discloses the instant application's claimed invention of a qualitative respirator fit test system (note the use of reagent reaction to detect leakage) to include the use of a plurality of test stations (the wooden heads 3) and an automated tainted gas system in fluid communication with each test station, but does not explicitly disclose the automated system generating an aerosol. However, Tilley disclose the use of an automated aerosol generation system for testing masks (38). The references are analogous since they are from the same field of endeavor, the respiratory arts. At the time the instant application's invention was made, it would have been obvious to one of ordinary skill in the art to have taken the features of Tilley and used them with the device of France. The suggestion/motivation for doing so would have been because the scope of the teaching of France of using a "tainted" gas generator would include that of an aerosol generator and because Dougherty discloses the use of

Art Unit: 3761

a testing gas verses a testing aerosol are known interchangeable equivalents (See col. 12 lines 15-60). Therefore it would have been obvious to combine the references to obtain the instant application's claimed invention.

Furthermore, such a feature is old and well known in the art, and one of skill in the art would consider such to amount to a matter of mere obvious and routine choice of design, rather than constitute a patently distinct inventive step, barring a convincing showing of evidence to the contrary.

In regards to claim 22, the suggested device substantially discloses the instant application's device to including dedicating one aerosol generator to one testing station (See Tilley) but does not disclose the provision of a plurality of aerosol generators, dedication one station to each test station, i.e. the duplication of a known part for a known purpose. However, at the time the instant application's invention was made, it would have been obvious to one of ordinary skill in the art to have duplicated the number of aerosol generators to match the number of test stations. The suggestion/motivation for doing so would have been to process more personnel for mask test fit more quickly. Therefore it would have been obvious to ob duplicated a known part for a known purpose to obtain the instant application's claimed invention.

Furthermore, it is noted that applicant's specification does not set forth this duplication of a known part for a known purpose, as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art.

Art Unit: 3761

Accordingly, the examiner considers the duplication of a known part for a known purpose to be a mere obvious matter of design choice and as such does not patently distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

In regards to claim 24, the suggested device discloses an aerosol generator in fluid communication with at least two test stations.

In regards to claim 25, the suggested device discloses the use of a respirator fit test hood for each test station. (See Tilley abstract & summary of invention of use of a containment shroud when being exposed to aerosol.

In regards to method claims 1-20 & 26-36, one of ordinary skill in the art would appreciate that the method steps claimed in the instant application would naturally flow from the device disclosed in the prior art as noted above and therefore are rejected herein above with respect to claims 21-22, 24-25, with specific reference to the various method steps noted as follows:

In regards to claims 1, 15, 16-17, 27 the suggested device discloses receiving test subject(s) feedback from testing, to include feedback regarding "sensitivity" aerosols and when "remote" (Note Tilley's disclosure of receiving data results from the testing of the test subject, note Dougherty regarding the use of odors to elicit test subject feedback, e.g. "Banana oil" Bitrex or stannic chloride all commonly known and used mask test fit reagents in Qualitative Mask Test Fitting QMTF).

Art Unit: 3761

In regards to claims 2-3, 7, 34 the suggested device discloses simultaneous testing and prompting of test subjects at the stations (See France)

In regards to claim 6-7, regarding the use of predetermined time intervals, the suggested device discloses such (See Tilley col. 9 lines 5-45)

In regards to claim 8, the suggested device is fully capable of delivering different amounts of aerosol to different test stations/subjects.

In regards to claims 9-10, 19-20, 28-29 the suggested device discloses storage of results in a database (See Abstract and summary of the invention, use/creation of a "data log").

In regards to claim 11, 30 the suggested device discloses monitoring of the test stations during testing. (See figs 17-39 of Tilley disclosing electronic monitoring, note France's visual monitoring, all during testing)

In regards to claim 12, 31 the suggested device discloses the capture and storage of images during testing (See Tilley disclosing the monitoring of screens 272-282 & 370-380 and 398 and the data depicted on the screen being "captured" in memory, the data log)

In regards to claim 13-14, 32-33 the suggested device discloses the prompting of test subjects to perform activities during testing (See Dougherty col. 12 lines 5-15).

In regards to claim 18, the suggested device is fully capable of selectively shutting off testing of an individual test subject.

Art Unit: 3761

In regards to claim 26, the suggested device is fully capable of remote automated test fitting (See the abstract which discloses the device can go to field sites for testing, and that the different components of the device are remote from each other).

In regards to claims 35 & 36, the suggested device is fully capable of being provided at a remote location in multiples for simultaneous operation.

3. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over France, Tilley & Dougherty as applied to claim 21 above, and further in view of Loedding et al. (US 5156776).

The suggested device substantially discloses the instant application's claimed invention, but does not explicitly disclose the use of a nebulizer as the aerosol generator. However, Loedding disclose such (See element 2). The references are analogous since they are from the same field of endeavor, the respiratory arts. At the time the instant application's invention was made, it would have been obvious to one of ordinary skill in the art to have taken the features of Loedding and used them with the suggested device. The suggestion/motivation for doing so would have been to because use of a nebulizer falls within the scope of an aerosol generator and because use of a nebulizer produces an optimal and uniform aerosol cloud. Therefore it would have been obvious to combine the references to obtain the instant application's claimed invention.

Furthermore, such a feature is old and well known in the art, and one of skill in the art would consider such to amount to a matter of mere obvious and routine choice of design, rather than constitute a patently distinct inventive step, barring a convincing showing of evidence to the contrary.

Art Unit: 3761

*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6125845, 5529056, 5500027, 5320108, 5289819, 5233975, 4146025, 3580051, 2420372, DA Pam 40-8

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph F. Weiss, Jr., whose telephone number is (703) 305-0323. The Examiner can normally be reached from Monday-Friday from 8:30 AM to 4:30 PM.

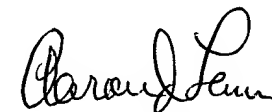
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Weilun Lo, can be reached at telephone number (703) 308-1957. The official fax number for this group is (703) 305-3590 or x3591.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858.



Jfweiss

November 5, 2002



Aaron J. Lewis  
Primary Examiner